

Subject: Comments on Designation of Critical Habitat SRKW - National Wildlife Federation
From: "James Schroeder" <SchroederJ@nwf.org>
Date: Mon, 14 Aug 2006 17:46:31 -0400
To: <orcahabitat.nwr@noaa.gov>

Please find attached comments on designation of critical habitat for Southern Resident Killer Whales.

Thank You,

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The mission of the National Wildlife Federation is to inspire
Americans
to protect wildlife for our children's future.

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National Wildlife Federation

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August 23, 2006

Donna Darm
Chief, Protected Resources Division
1210 NE Lloyd Blvd., Suite 1100
Portland, OR 97322-1274
VIA email: orcahabitat.nwr@noaa.gov

RE: Proposed Critical Habitat for Southern Resident Killer Whales

Dear Ms. Darm:

National Wildlife Federation appreciates the opportunity to comment on the *Designation of Critical Habitat for the Southern Resident Killer Whale*, published in the Federal Register on June 15, 2006. The designation of critical habitat is an important step towards the recovery of our treasured Southern Resident Killer Whales (SRKW) and we are pleased to see thorough analyses in both the critical habitat proposal and in the proposed Conservation Plan.

One of the primary causes in the precipitous decline of the Southern Residents has been attributed to the decline in prey abundance. Both the proposed Conservation Plan and the Designation of Critical Habitat cite study results that show that salmon represent over 96% of the SRKW's prey during the summer and fall months. In fact, these studies also conclude that the vast majority of salmon selected as prey by the SRKW is chinook salmon, representing over 70% of the identified salmonids taken. Chum salmon represented the next most significant prey with approximately 22% of all salmonids taken. The inclusion of these study results is very important in the consideration of critical habitat designations for the SRKW because their recovery will be dependent on adequate populations of chinook and chum salmon.

Section 3(ii) of the ESA defines critical habitat to include "specific areas outside the geographical area occupied by the species at the time it is listed..., upon a determination by the Secretary that such areas are essential for the conservation of the species." This section goes on to define "conserve" and "conservation" to mean: "to use, and the use of, all methods and procedures which are necessary to bring any endangered or threatened species to the point at which the measures provided pursuant to this chapter are not longer necessary." Therefore, our analysis concludes that because adequate populations of salmon, chinook salmon in particular,

are a necessary element of SRKW conservation, habitats that are critical to support healthy salmon populations must also be considered as critical habitats for the SRKW.

The Designation of Critical Habitat in the Federal Register provides ample discussion of Physical or Biological Features Essential for Conservation, or Primary Constituent Elements (PCE) and their role in conserving the listed species. This section informs us that PCEs include but are not limited to 1) space for individual and population growth, and for normal behavior; 2) food, water, air, light, minerals, or other nutritional or physiological requirements; 3) cover or shelter; 4) sites for breeding,...” Furthermore, the joint NMFS and USFWS regulations for designating critical habitat state that agencies must consider PCEs that may require special management consideration or protections. In this case, the PCE that requires special management consideration is salmon, the food source for the SRKWs. The SRKWs will not be recovered if there is inadequate prey base to support them.

The Federal Register Notice states that “sufficient prey abundance is necessary to support individual growth to reach sexual maturity and reproduction, including lactation and successful rearing of calves.” In order for there to be adequate salmon populations to ensure this, we suggest the following revision to the proposed critical habitat designation:

1) Include the Puget Sound Nearshore in the Critical Habitat for the SRKW

The Notice in the Federal Register concludes that because individual killer whales are large in body size, they do not utilize the marine nearshore habitat where waters are less than 20 feet deep. The Notice presumes a killer whale would have limited maneuverability in shallow water, but subsequently states that there is limited information on Southern Resident use of shallow water habitat. However, it is well documented that the estuaries and nearshore environments of Puget Sound are very important rearing habitats for juvenile salmon, chinook in particular. With adequate prey listed as a PCE and the decline of SRKW populations closely connected to the health of regional salmon populations, it is most appropriate to include this important nearshore habitat as critical habitat as called for in section 3(ii).

Another cause in the decline of SRKW populations is environmental contaminants such as organochlorines, polybrominated diphenyl ethers (PBDEs), heavy metals, and other chemical compounds that can cause immune suppression, endocrine disruption, and other deleterious effects on killer whales. Many of these contaminants are passed through the food web, bioaccumulating in species at the highest trophic levels and are stored in blubber reserves. The most contaminated areas in the SRKW range are located in the urbanized and industrialized bays of Puget Sound, such as Bellingham Bay, Elliot Bay and Commencement Bay. With these bays also serving as the estuarine and nearshore habitats for rearing juvenile salmon, there is a clear path of contamination through the prey base. In order for SRKW recovery to be successful, areas with contaminated sediments must be restored to health. This includes nearshore areas with depths of less than 20 feet. There is ample scientific data on the utilization of nearshore habitats by juvenile salmon, herring and other forage fish. To prevent continued bioaccumulation of toxics in SRKW, toxic sediments in the nearshore environments of Puget Sound must be remedied. This is further reason why SRKW critical habitat should include Puget Sound’s entire nearshore environment.

2) Include Coastal Waters in the Critical Habitat for the SRKW

National Marine Fisheries Service (NMFS) has chosen to exclude the coastal waters of Washington outside of Puget Sound and the Strait of Juan de Fuca because of a dearth of information regarding killer whale use of the Pacific shore. However, we believe there is ample evidence to include the Pacific coastal areas of Washington in the critical habitat designation. Critical habitat Area 3 proposed in the Notice, called Area 3-Straight of Juan de Fuca, is listed as “primarily a passage used to access outer coastal waters feeding grounds...” The Proposed Conservation Plan for Southern Resident Killer Whales states on page 25 that both the K and L pods of the Southern Residents make “frequent trips lasting a few days to the outer coasts of Washington...” The K and L pods have been sighted as far south as Monterey Bay in California and there have been sightings of the SRKW pods feeding off Westport, Washington and at the mouth of the Columbia River. It is often the case that these sightings are in conjunction with strong chinook or chum salmon runs. In sum, we know that the Southern Residents leave Puget Sound in the late fall and return in the early spring. With sightings ranging from Northern California to British Columbia, it can be concluded that the coastal waters off the Washington coast provide important winter foraging habitat for the SRKW.

NMFS writes in the Notice on page 34576 “While we can infer that some of the PCEs, such as prey, must be present (in coastal areas) to support the whales, we do not have sufficient data to describe them adequately and identify “specific areas” with those features.” While NMFS has preliminarily decided to wait for further information to determine the value of coastal areas for the SRKW, we urge reconsideration of this decision due to conclusive sightings of the SRKWs and a probability that they depend on prey in the coastal waters.

3) Include an Analysis of Major Hydroelectric Projects under ESA Section 7’s Adverse Modification Requirement

The Notice examines the impacts of three activities that may affect SRKW critical habitat and therefore be subject to ESA Section 7’s adverse modification requirement. Salmon fishing is an activity that is analyzed for its impacts on Southern Resident prey base. As discussed above, research shows that salmon comprise over 96% of the SRKW diet, with chinook salmon accounting for the vast majority (over 70%) of salmon species taken. The Notice provides explanation of an impact analysis performed on salmon fishing because: “Salmon fishing directly affects individual members of the species by reducing the amount of food available, and, therefore, potentially affecting the ability of individual animals to meet their nutritional requirements. Salmon are also one of the biological features in the habitat essential to conservation of the whales, so fishing also modifies critical habitat by removing prey.” Similarly, other federal actions or projects that limit prey availability should be considered for a section 7 adverse modification prohibition analysis. The clearest example of such a project is the federal licensing of hydroelectric dams that significantly reduce salmon populations.

The Proposed Conservation Plan for SRKW states that “perhaps the greatest change in food availability for resident killer whales since the late 1800s has been the decline of salmon in the Columbia Basin.” Due to the dams on the Columbia and Lower Snake Rivers, predevelopment run sizes have reduced by 90% from 10-16 million salmon to only 1.1 million in the 1990s. The Conservation plan concludes that “with so many fish once present, salmon returning to the Columbia River mouth may have been an important part of the diet of southern resident whales.”

Using the same logic that salmon fishing is an activity that reduces prey base for the SRKW, NMFS should analyze other activities, in particular federal hydropower projects, which are also known to have a significant and direct impact on salmon abundance.

4) Include an Economic Analysis of Recovered Salmon Populations in *Benefits of Designation* Section

In the *Benefits of Designation* section, the Notice discusses both direct and ancillary benefits of critical habitat designation for the Southern Resident killer whales. The idea of monetizing benefits of critical habitat designation deserves more consideration. Specifically, the Notice calls out as an example of an ancillary benefit “the increased viability of Puget Sound salmon populations if their harvest is reduced to assure a larger prey supply for killer whales.” However, the science is clear that harvest is not the only action with a federal nexus limiting salmon populations, and thereby limiting prey supply for the SRKW. And, the natural history of the SRKW as explained in the Conservation Plan concludes that salmon populations from coastal waters, the Columbia River, and even further south into Oregon and Northern California, are likely important prey supply for the Southern Residents. Therefore, we urge NMFS to expand its proposed critical habitat designation to include the Puget Sound nearshore, coastal waters, and the Columbia River mouth and to consider the increased viability of Puget Sound, coastal waters, and Columbia River salmon as ancillary benefits of this critical habitat designation. While the notice states that there is not sufficient information currently available to monetize the ancillary benefits of reduced harvest on Puget Sound salmon supply, we believe there are studies available that provide analysis of the economic benefits of recovered salmon populations in Puget Sound and the Columbia River.

5) Include Impacts from Climate Change

Impacts anticipated from global warming and subsequent climate change are receiving well-deserved consideration in natural resource management plans. Climate change and its associated impacts should be considered in designation of critical habitat for the Southern Residents so that, as our climate changes and SRKW habitat is affected, the species has adequate habitat protected to enable it to be most resilient. The most significant impact to SRKW from climate change is likely to be a further reduction in the viability of Pacific salmon populations in Puget Sound, the Columbia River, and Canadian rivers to the north. Scientific analysis shows that regional precipitation patterns, water temperatures, and overall ecology of Pacific Northwest rivers are changing due to global warming. Dams and impervious surfaces in urban areas have created unnatural flow regimes that have affected salmon viability in the region. Recovering salmon populations so that there is an adequate prey base to support the SRKW will require addressing global warming in wildlife management plans, particularly in designation of critical habitat for our most threatened and endangered species, such as the Southern Resident Killer Whales.

The most effective way to incorporate the uncertainty of a changing climate is to err on the side of the species when developing a recovery plan and critical habitat designations. We know that limited salmon supply is a cause for decline of the SRKW and that in order to reverse this decline, and meet the obligations of the ESA, adequate prey base must be secured. In order for this to be achieved, salmon habitat must be restored.

In light of global warming and its anticipated deleterious impacts on regional salmon populations, critical habitat designation for the SRKW should be expanded to include the nearshore region of Puget Sound, the Coastal Waters of Washington, and the Columbia River mouth. Instead of underestimating the requirements of the SRKW, we must err on the side of the species to provide it with the greatest chance of reaching a recovered status. To do this we should be inclusive in the designation of critical habitat.

Thank you for the opportunity to comment on the Designation of Critical Habitat for the Southern Resident Killer Whales. These iconic species are not only our state's official marine mammal, but are an important part of the identity of the Pacific Northwest. In order to preserve these valued whales, we must be bold with the designation of critical habitat. There are some data gaps regarding the Southern Residents' migratory patterns and utilization of shallow waters in Puget Sound. However, we know enough to protect their habitat in a meaningful way that will provide them the best chance at recovery. That means taking a holistic approach to protecting the ecosystem of which they are a part. Recovering our Southern Residents will rely on replenishing our beleaguered salmon stocks, not just in Puget Sound, but throughout the entire range of the SRKW. The first step of designating critical habitat is an important one that helps set the tone for the sincerity of our efforts to recover these animals. Without including the Puget Sound nearshore, Coastal Waters off the Washington coast, and recognizing that salmon stocks across the region are an important food supply, these whales will not be as well protected as they should be.

Please feel free to contact this office with any questions and thank you for the opportunity to comment on this important proposed rule.

Sincerely,

A handwritten signature in black ink, reading "Paula J. Del Giudice". The signature is fluid and cursive, with the first name "Paula" and last name "Del Giudice" clearly legible.

Paula J. Del Giudice, Director
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